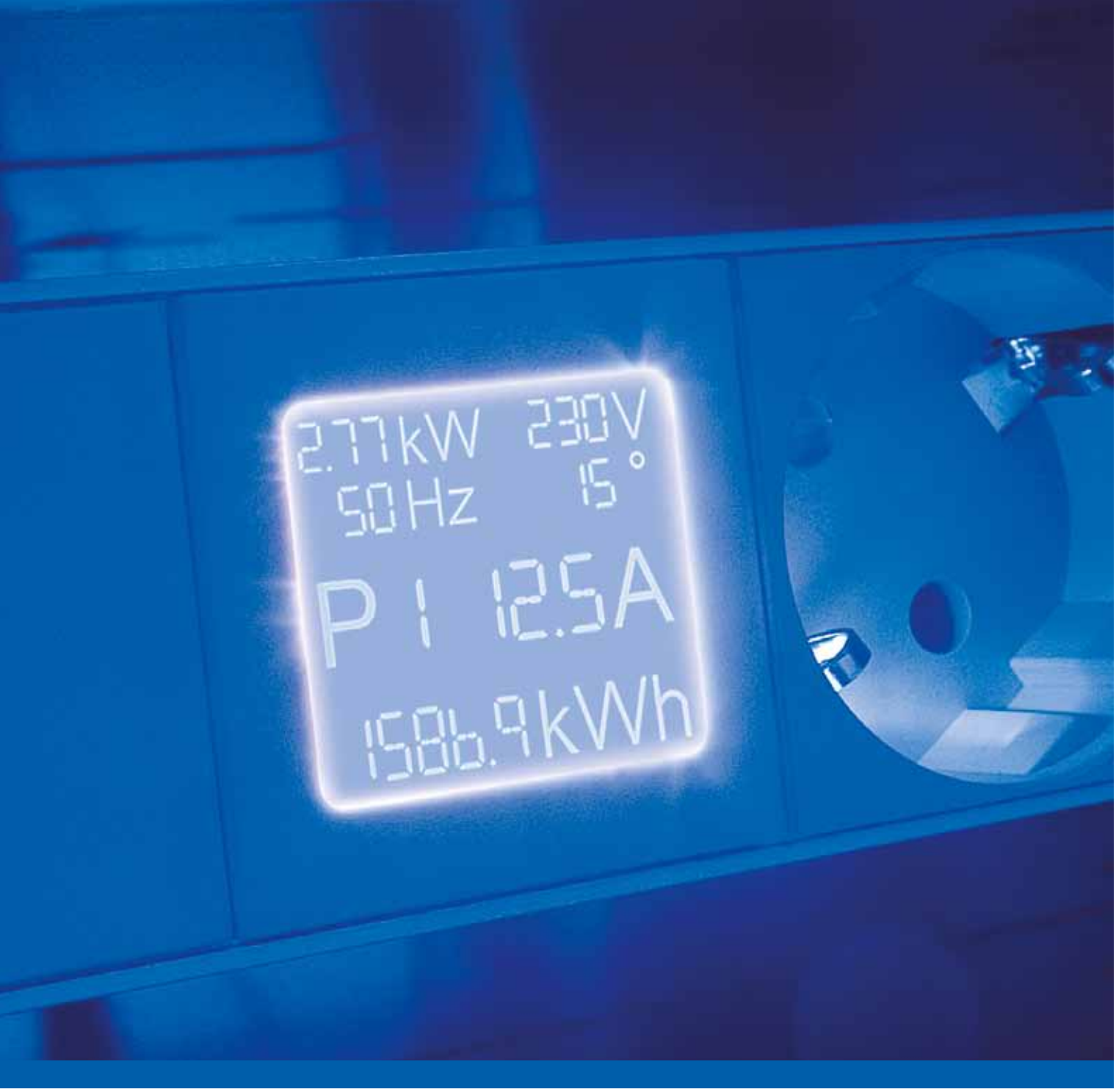
ENGLISH / 2012



IT POWER DISTRIBUTION

Efficient Power Management

BACH MANN

Bachmann International.
Build on the best connections.

Bachmann makes connections. To ensure that power and data are available right where you need them. For industrial, commercial and home applications, in offices and training rooms, on desks and on conference tables. Bachmann facility and IT systems are flexible enough that you can modify them at any time to suit future power or data management needs. And with Bachmann's up-to-the-minute range of electrical components you can be sure of satisfying even your customers' more unusual electrical and electronics requirements.

One of Bachmann's primary objectives is to deliver innovative products to help our customers achieve long-term success. For this reason we exploit all the possibilities offered by professional engineering and modern process management to develop our standardised and customised systems and products.

Consider, for example, energy management optimisation and the efficient use of energy. Our technicians are working on intelligent products and on realising opportunities for tapping into efficient energy concepts.If you would like to improve your connections, discuss your projects with us.
We are with you from the initial in-depth consultation and the supply of pre-finished components and modules through to planning and developing your specific solutions. With our products, system solutions and development team we offer a high level of quality and expertise - resulting in optimal solutions.
We look forward to making the best connections for you - and with you.

Quality at all levels
Do not be satisfied until you have the optimum solution. A philosophy that applies at every level of our company and that is consistently demonstrated by all our employees.
The result: products to match the best on the world's markets, outside and inside.
This is also evident from our certification to DIN EN ISO 9001:2000.

Contents

INTRODUCTION / APPLICATION EXAMPLES 4

POWER DISTRIBUTION UNIT 1 U 18
Power supply system for 19" data racks

POWER DISTRIBUTION UNIT > 1 U 28
Power supply system for 19" data racks

BLUENET 32
Intelligent power supply system for 19" data racks.

BluNet
Efficient Power Management

ACCESSORIES 46

IT POWER DISTRIBUTION

Systematic Bachmann IT power distribution

Forty years of experience in developing, manufacturing and distributing power distribution solutions. True to this history, BACHMANN is synonymous with high-quality and innovative electronics and high measurement accuracy, packaged in extremely robust aluminium housings.

We provide solutions in IT energy distribution. Our intelligent and modular product range provides great peace of mind. The -PDU Basic power distribution unit and Bachmann's BlueNet products meet all key requirements for future-proofed, highly efficient energy distribution, especially for data centres.

Bachmann Power Distribution provides various solutions for this sector:

- New and intelligent energy distribution systems
- Upgrading of existing energy distribution systems
- Combination of existing PDUs and Bachmann Power Distribution products

SAMPLE RACK CONFIGURATION

Sample system

IT PDU Basic 1 U
12 x IEC C320 C13 with interlock
6 x socket outlet with earthing contact
Split into 3 phases
Art. no. 800.0109
(See page 25)

Supply A
16 A / 400 V / 50 Hz

IT PDU Basic 1 U
12 x IEC C320 C13 with interlock
6 x socket outlet with earthing contact
Split into 3 phases
Art. no. 800.0109
(See page 25)

Supply B
16 A / 400 V / 50 Hz

The advantages at a glance

- High packing density (48 A / PDU)
- Space-saving (depth: 47 mm)
- Also fits in small racks
- Good availability (N +1 redundancy)
- C13 lockable sockets
- Phases identified by colour

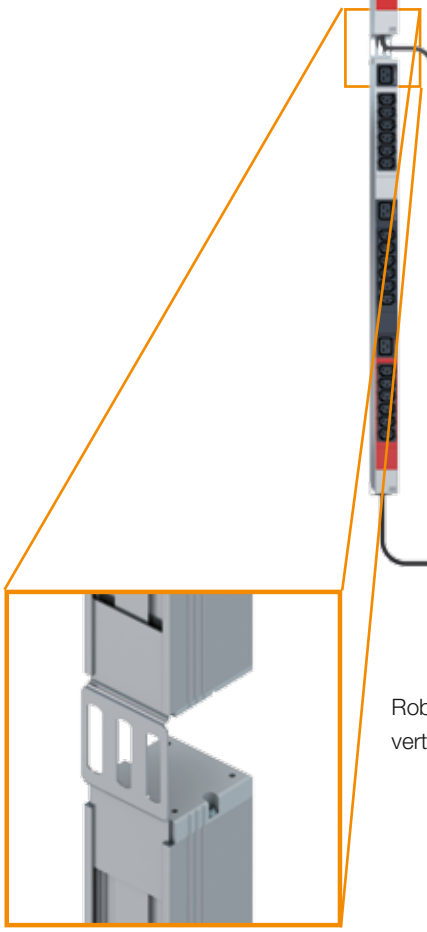
SAMPLE RACK CONFIGURATION

Sample system

IT PDU Basic 1 U
12 x IEC C320 C13 with interlock
6 x socket outlet with earthing contact
Split into 3 phases
Art. no. 800.0109
(See page 25)

IT PDU Basic 1 U
18 x IEC C320 C13 with interlock
3 x IEC C320 C19 with interlock
Split into 3 phases
Art. no. 800.0104
(See page 25)

Supply A
2 x 16 A / 400 V / 50 Hz



IT PDU Basic 1 U
12 x IEC C320 C13 with interlock
6 x socket outlet with earthing contact
Split into 3 phases
Art. no. 800.0109
(See page 25)

IT PDU Basic 1 U
18 x IEC C320 C13 with interlock
3 x IEC C320 C19 with interlock
Split into 3 phases
Art. no. 800.0104
(See page 25)

Supply B
2 x 16 A / 400 V / 50 Hz

Robust and compact fixing of two PDUs with vertical link.

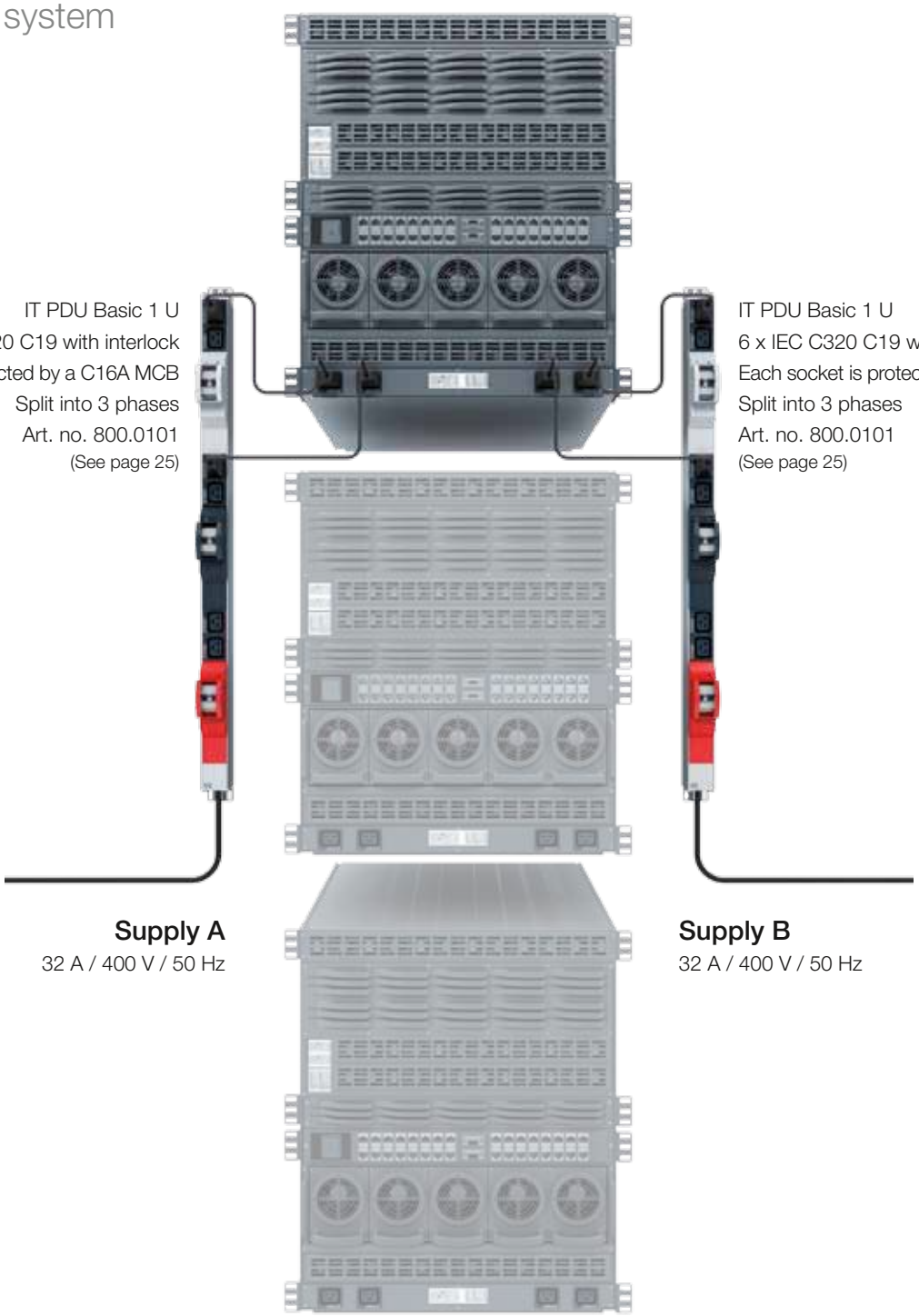
The advantages at a glance

- Very high packing density (96 A per side)
- Very good MTTR (mean time to repair)
- Space-saving (depth: 47 mm)
- Maximum availability thanks to complete physical and electrical isolation
- Lockable C13 and C19 sockets
- Phases identified by colour

BLADE CENTER RACK

Sample system

IT PDU Basic 1 U
6 x IEC C320 C19 with interlock
Each socket is protected by a C16A MCB
Split into 3 phases
Art. no. 800.0101
(See page 25)



IT PDU Basic 1 U
6 x IEC C320 C19 with interlock
Each socket is protected by a C16A MCB
Split into 3 phases
Art. no. 800.0101
(See page 25)

Supply A
32 A / 400 V / 50 Hz

Supply B
32 A / 400 V / 50 Hz

The advantages at a glance

- Little wiring work required
- Fuse protection in rack with protection against accidental switching
- Selective fuse configuration
- Redundant power supply specially designed for high power ratings (22 kW per PDU)
- Compact PDU construction

UPGRADE SOLUTION

Sample system

PDU already installed
BlueNet Monitored upgrade module
16 A / 400 V / 50 Hz CEE plug
16 A / 400 V / 50 Hz CEE coupling
Art. no. 329.3004
(See page 40)
Supply
16 A / 400 V / 50 Hz

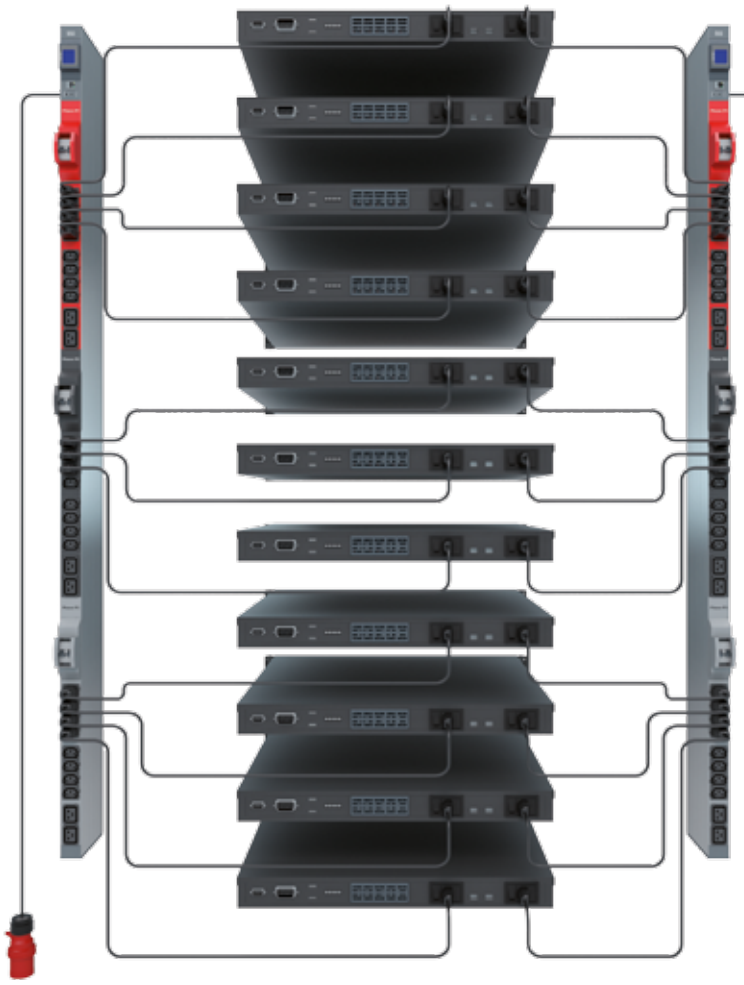
The advantages at a glance

- Easy to upgrade using plug connector
- Phase-level monitoring (current, voltage, power, power factor)
- Monitoring of neutral conductor
- Integrated Ethernet interface
- Interface for external temperature and humidity sensors
- OLED display rotatable by software
- Upgrade modules up to 32 A depending on version

INTELLIGENT PDU CONCEPT

Sample system

BlueNet PDU
Managed
Measurement per phase
Each port separately switchable
24 x IEC C320 C13
with interlock
6 x IEC C320 C19
with interlock
Split into 3 phases
Art. no. 329.800
(See page 43)



BlueNet PDU
Managed
Measurement per phase
Each port separately switchable
24 x IEC C320 C13
with interlock
6 x IEC C320 C19
with interlock
Split into 3 phases
Art. no. 329.800
(See page 43)

Supply A
32 A / 400 V / 50 Hz

Supply B
32 A / 400 V / 50 Hz

The advantages at a glance

- System with N + 1 redundancy
- Very high packing density (96 A per side)
- Integrated measurement of current, voltage, frequency, power factor, effective power and energy
- Each socket individually switchable
- MCBs split 32 A per phase over two blocks of 16 A each
- Integrated Ethernet interface

MODULAR POWER DISTRIBUTION

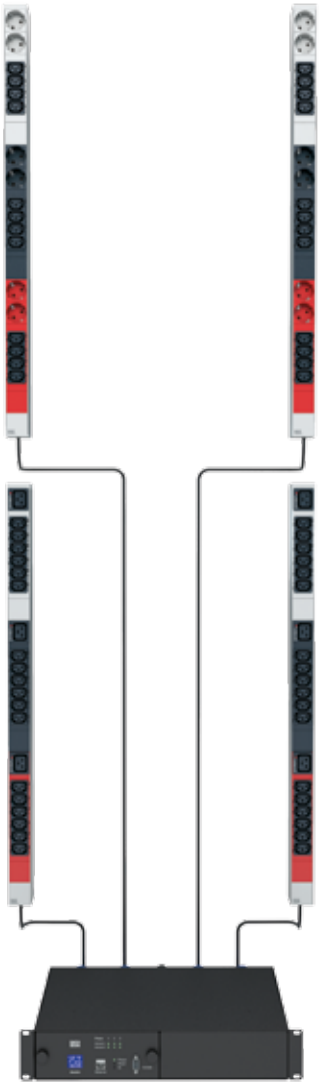
Sample system

IT PDU Basic 1 U
12 x IEC C320 C13 with interlock
6 x socket outlet with earthing contact
Split into 3 phases
Art. no. 800.0109
(See page 25)

IT PDU Basic 1 U
12 x IEC C320 C13 with interlock
6 x socket outlet with earthing contact
Split into 3 phases
Art. no. 800.0109
(See page 25)

IT PDU Basic 1 U
18 x IEC C320 C13 with interlock
3 x IEC320 C19 with interlock
Split into 3 phases
Art. no. 800.0104
(See page 25)

IT PDU Basic 1 U
18 x IEC C320 C13 with interlock
3 x IEC320 C19 with interlock
Split into 3 phases
Art. no. 800.0104
(See page 25)



Supply A
16 A / 400 V / 50 Hz

Supply B
16 A / 400 V / 50 Hz

BlueNet Power Unit with measurement module
329.9008 + 329.9011

The advantages at a glance

- Two galvanically isolated infeeds, 400 V / 16 A / 50 Hz each
- Up to four multiple-socket outlets can be connected
- Measurement module removable during operation (plug-and-play)
- Integrated power metering
- Ethernet interface with integral web server
- Excellent cost/benefit ratio
- Modest space requirement (2 U)

MODULAR POWER DISTRIBUTION

Sample system

BlueNet PDU Switched
Each port separately switchable
12 x IEC320 C19
Split into three phases
Art. no. 329.704
(See page 42)

BlueNet PDU Switched
Each port separately switchable
12 x IEC320 C19
Split into three phases
Art. no. 329.704
(See page 42)

Supply A
32 A / 400 V / 50 Hz

Supply B
32 A / 400 V / 50 Hz

BlueNet Power Unit with measurement module
329.9012 + 329.9011

The advantages at a glance

- Combines ideally with switchable PDUs
- Separate Ethernet interfaces for measurement and switching electronics
- Two galvanically isolated infeeds, 400 V / 32 A / 50 Hz each
- Up to two multiple-socket outlets can be connected
- Measurement module removable during operation (plug-and-play)
- Integrated power metering
- Ethernet interface with integral web server
- Excellent cost/benefit ratio
- Modest space requirement (2 U)

MODULAR POWER DISTRIBUTION

Sample system

2 x IT PDU Basic 1 U
36 x IEC C320 C13 with interlock
Split into 3 phases
Art. no. 800.0102
(See page 25)

2 x IT PDU Basic 1 U
36 x IEC C320 C13 with interlock
Split into 3 phases
Art. no. 800.0102
(See page 25)

Supply A
32 A / 400 V / 50 Hz

Supply B
32 A / 400 V / 50 Hz

BlueNet Power Unit with measurement module
329.9012 + 329.9011

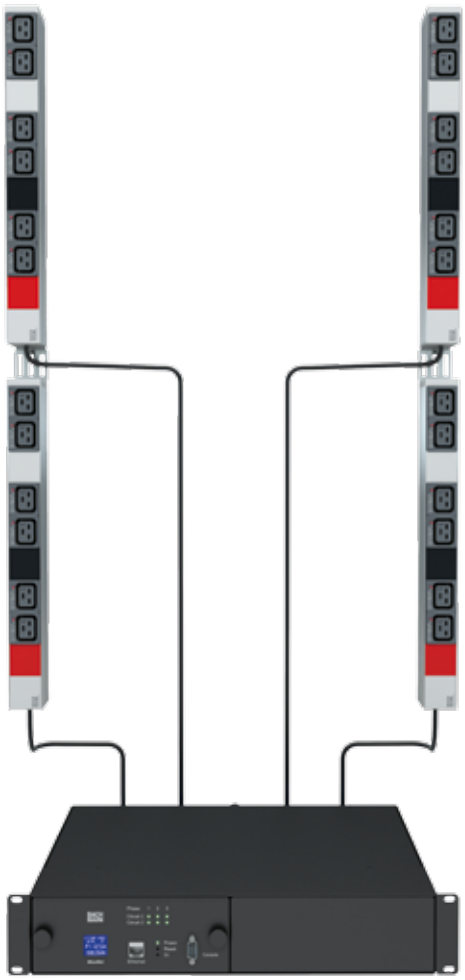
The advantages at a glance

- Ideal for combination with PDUs with built-in MCB C16 A circuit breakers)
- Cabling and installation kept to a minimum with 400 V / 32 A supply cables
- Two galvanically isolated infeeds, 400 V / 32 A / 50 Hz each
- Up to four multiple-socket outlets can be connected
- Measurement module removable during operation (plug-and-play)
- Integrated power metering
- Ethernet interface with integral web server
- Excellent cost/benefit ratio
- Modest space requirement (2 U)

MODULAR POWER DISTRIBUTION

Sample system

IT PDU Basic 1 U
6 x IEC C320 C19 with interlock
Split into 3 phases
Art. no. 800.0111
(See page 25)



IT PDU Basic 1 U
6 x IEC C320 C19 with interlock
Split into 3 phases
Art. no. 800.0111
(See page 25)

Supply A
16 A / 400 V / 50 Hz

Supply B
16 A / 400 V / 50 Hz

BlueNet Power Unit with measurement module
329.9013 + 329.9011

The advantages at a glance

- Ideal for combination with blade PDUs
- Two galvanically isolated infeeds, 400 V / 16 A / 50 Hz each
- Up to four multiple-socket outlets can be connected
- Measurement module removable during operation (plug-and-play)
- Integrated power metering
- Ethernet interface with integral web server
- Excellent cost/benefit ratio
- Modest space requirement (2 U)

MODULAR POWER DISTRIBUTION FOR BLADE CENTER

Sample system

BlueNet Power Unit with measurement module
Art. no. 329.9015 and 329.9010
(See page 45)

Supply A
16 A / 400 V / 50 Hz

BlueNet Power Unit with measurement module
Art. no. 329.9015 and 329.9010
(See page 45)

Supply B
16 A / 400 V / 50 Hz

BlueNet Power Unit with measurement module
Art. no. 329.9015 and 329.9010
(See page 45)

Supply A
16 A / 400 V / 50 Hz

BlueNet Power Unit with measurement module
Art. no. 329.9015 and 329.9010
(See page 45)

Supply B
16 A / 400 V / 50 Hz

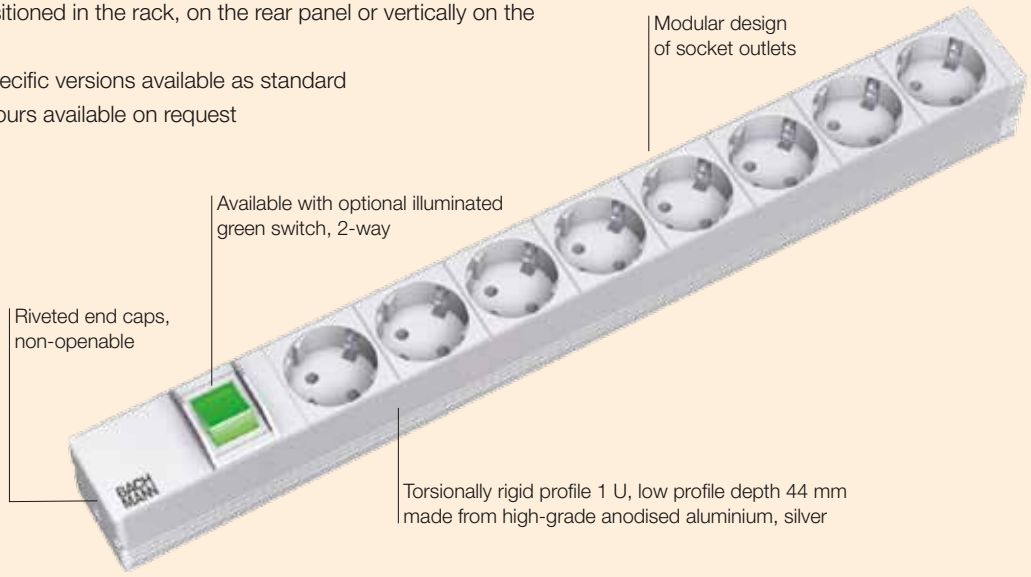
The advantages at a glance

- Up to four consumers can be directly connected via C19 plugs
- Ideal for combination with blade PDUs or a smaller number of servers in the rack
- Two galvanically isolated C20 infeeds, 400 V / 16 A / 50 Hz each
- Measurement module removable during operation (plug-and-play)
- Integrated power metering
- Ethernet interface with integral web server
- Excellent cost/benefit ratio
- Modest space requirement (2 U)

IT PDU 1 U

19” IT PDU Basic (230 V / 50 Hz)

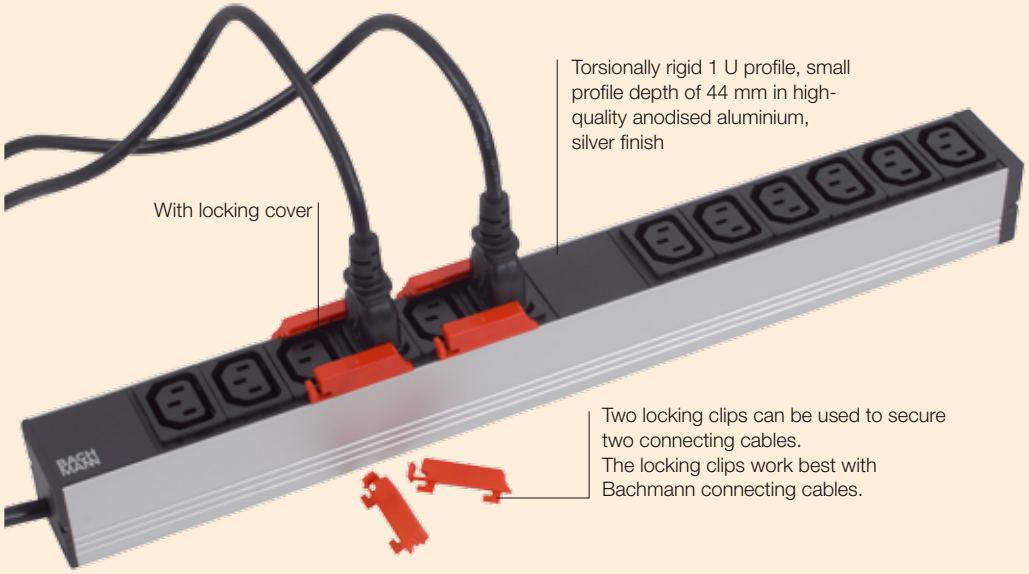
· Power supply for 19" data racks
· Universal bracket for mounting in a 19" data rack
· Can be flexibly positioned in the rack, on the rear panel or vertically on the enclosure frame
· Various country-specific versions available as standard
· Various socket colours available on request


Modular design of socket outlets
Available with optional illuminated green switch, 2-way
Riveted end caps, non-openable
Torsionally rigid profile 1 U, low profile depth 44 mm made from high-grade anodised aluminium, silver

IEC LOCKABLE

19” IT PDU Basic (230 V / 50 Hz)

· Power supply for 19" data racks with lockable IEC socket outlets
· Locking mechanism prevents plugs being accidentally pulled out
· Various socket colours available on request

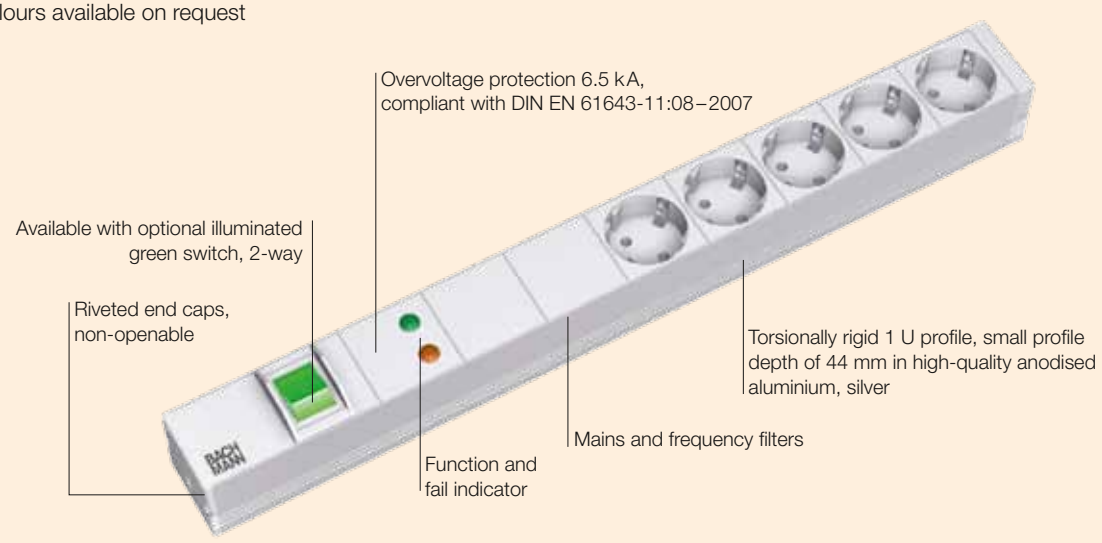

Torsionally rigid 1 U profile, small profile depth of 44 mm in high-quality anodised aluminium, silver finish
With locking cover
Two locking clips can be used to secure two connecting cables.
The locking clips work best with Bachmann connecting cables.

Mounting brackets included with all PDUs.

OVERVOLTAGE PROTECTION

19” IT PDU Basic (230 V / 50 Hz)

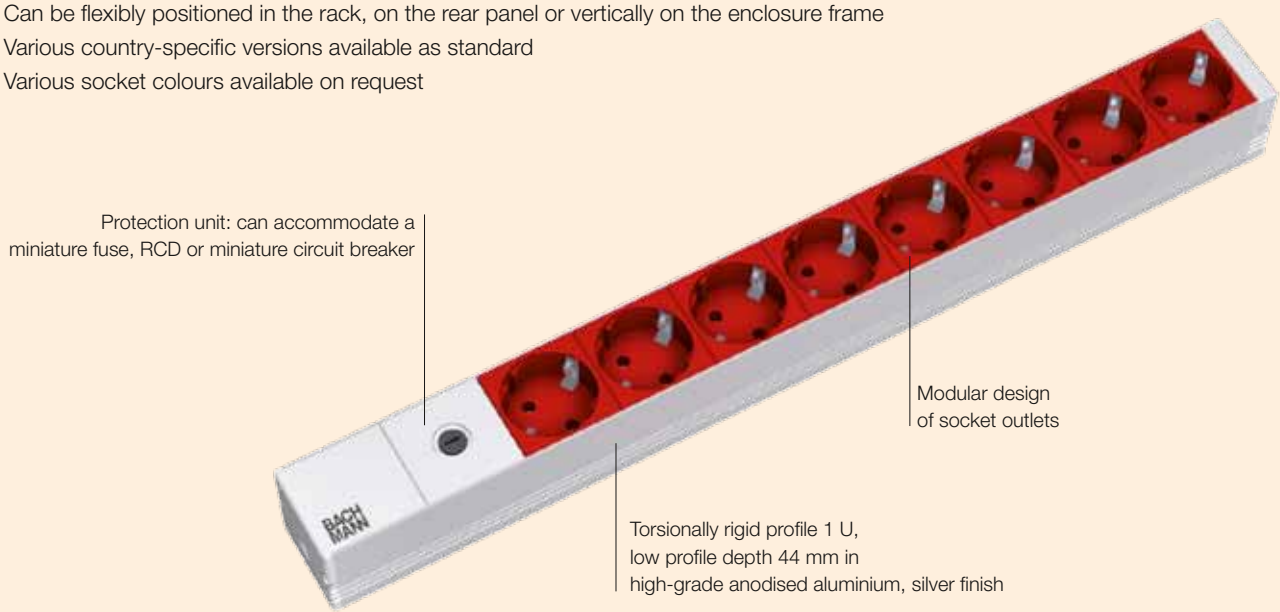
· Power supply for 19" data cabinets with integrated protection functions
· Overvoltage protection against current peaks in 30 V mains supply
· Mains and frequency filters to attenuate high-frequency interference (symmetrical and asymmetrical)
· Various socket colours available on request



PROTECTION

19” IT PDU Basic (230 V / 50 Hz)

· Power supply for 19" data racks with built-in fuse protection
· Universal bracket for mounting in a 19" data rack
· Can be flexibly positioned in the rack, on the rear panel or vertically on the enclosure frame
· Various country-specific versions available as standard
· Various socket colours available on request


Protection unit: can accommodate a
miniature fuse, RCD or miniature circuit breaker
Modular design
of socket outlets
Torsionally rigid profile 1 U,
low profile depth 44 mm in
high-grade anodised aluminium, silver finish

Mounting brackets included with all PDUs.

IT PDU BASIC 1U

Power Distribution Units 230 V / 50 Hz

With its IT-PDU 1 U, Bachmann provides a huge choice of PDUs in a high-quality aluminium profile. With their extremely compact size of just 1 U in height, 44 mm in depth and 19" in width, the PDUs can be easily integrated in your IT rack. Their multi-functional mounting brackets allow the units to be mounted in various ways (e.g. inwardly recessed). Our high quality standards ensure that the contact is reliable.

19" IT PDU Basic (230 V / 50 Hz)

For description see pages 16/17

Art. no.	Version	Colour (plastic / profile)
19" IT PDU Basic		
without switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.401	9 socket outlets with earthing contact, light grey	light grey / silver
333.506	9 socket outlets with earthing contact, light grey	black / black
333.539	9 IEC320 non-heating appliance socket outlets C13 black	light grey / silver
333.616	12 IEC320 non-heating appliance socket outlets C13 black	black / black
without switch, 2.0 m H05VV-F 3G 1.50 mm², black, with IEC320 C20 plug		
333.815	8 IEC320 non-heating appliance socket outlets C19 black	light grey / silver
without switch, without supply cable, rewireable with terminal block		
333.416	8 socket outlets with earthing contact, light grey	light grey / silver
333.830	12 IEC320 non-heating appliance socket outlets C13 black	black / black
with switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.400	8 socket outlets with earthing contact, light grey	light grey / silver
333.505	8 socket outlets with earthing contact, light grey	black / black

LOCKABLE

LOCKABLE

19" IT PDU overvoltage protection (230 V / 50 Hz)

For description see pages 16/17

Art. no.	Version	Colour
19" IT PDU Basic with overvoltage protection		
without switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.404	8 socket outlets with earthing contact grey	light grey / silver
333.534	8 socket outlets with earthing contact black	black / black
with switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.405	7 socket outlets with earthing contact, light grey	light grey / silver
333.535	7 socket outlets with earthing contact black	black / black
19" IT PDU Basic with overvoltage protection + mains and frequency filters		
without switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.402	6Socket outlets with earthing contact, light grey	light grey / silver
333.536	6Socket outlets with earthing contact, black	black / black
with switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.403	5 socket outlets with earthing contact, light grey	light grey / silver
333.537	5 socket outlets with earthing contact, black	black / black
19" IT PDU Basic mains and frequency filters		
without switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.406	7 socket outlets with earthing contact, light grey	light grey / silver

19" IT PDU Protection (230 V / 50 Hz)

For description see pages 16/17

Art. no.	Version	Colour (plastic / profile)
19" IT PDU Basic with fusing		
10 A miniature fuse, 2.0 m H05VV-F 3G 1.00 mm², black, with IEC320 C14 plug		
333.410	8 socket outlets with earthing contact, red	light grey / silver
333.538	8 socket outlets with earthing contact, red	black / black
10 A miniature fuse, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.408	8 IEC320 non-heating appliance socket outlets C13 black	light grey / silver
10 A miniature fuse, 2.0 m H05VV-F 3G 1.00 mm², black, with IEC320 C14 plug		
333.540	8 IEC320 non-heating appliance socket outlets C13 black	light grey / silver
1 x residual current device, 16 A, tripping current 30 mA		
333.411	6 socket outlets with earthing contact, light grey	light grey / silver
1 x MCB 16 A type B		
333.412	6 socket outlets with earthing contact, light grey	light grey / silver

Zero U-Space IT PDU Basic (230 V / 50 Hz)

Art. no.	Version	Colour (plastic / profile)
Zero U-Space IT PDU Basic		
without switch, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.413	12 socket outlets with earthing contact, light grey	light grey / silver

10" IT PDU Basic (230 V / 50 Hz)

Art. no.	Version	Colour (plastic / profile)
IT PDU Basic		
10 ", 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.417	3 socket outlets with earthing contact, light grey	light grey / silver
333.0122	4 socket outlets with earthing contact, light grey	light grey / silver

19" IT PDU Master + Slave (230 V / 50 Hz)

· Automatically isolates all slave devices from supply once master device is shut down/switched off
· Automatically switches on all slave devices once master device has been switched on
· Integral LED indicates switching status

Art. no.	Version	Colour (plastic / profile)
19" IT PDU Master + Slave		
2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
333.407	1 + 4 socket outlets with earthing contact, light grey	light grey / silver

19" fuse box (32 A / 400 V / 50 Hz)

· Space-saving option of splitting a 32 A / 400 V infeed between two 16 A / 400 V infeeds
· 6 x 16 A miniature circuit breakers, characteristic C

Art. no.	Version
19" IT PDU fuse box	
Input: 32 A / 400 V CEE plug outlet: 2 x 16 A / 400 V coupling	
800.0120	6 x 16 A miniature circuit breakers, characteristic C

LOCKABLE

IEC320 C13 lockable

Two locking clips to secure two power cables. Locking is optimal only with Bachmann power cables.

Connecting cables and locking clips can be found on page 47.

IEC320 C19 with IEC lock

The IEC lock system protects computers, as servers and electrical equipment can become accidentally disconnected due to vibrations.

IT PDU BASIC 1U

Country versions

IT PDU Basic Switzerland

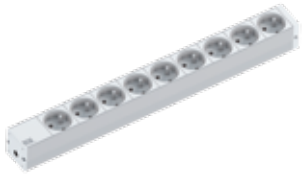
Art. no.	Version	Colour	Supply cable
19" IT PDU Basic Switzerland			
without switch			
333.0371	8 x CH type 13 90°	black	2.0 m H05VV-F 3G 1.0 mm² with CH plug type 12
333.0377	8 x CH type 23 90°	black	3.0 m H05VV-F 3G 1.5 mm² with CH plug type 23
with switch			
333.0374	7 x CH type 13 90°	black	2.0 m H05VV-F 3G 1.0 mm² with CH plug type 12
333.0378	7 x CH type 23 90°	black	3.0 m H05VV-F 3G 1.5 mm² with CH plug type 23
19" IT PDU Basic overvoltage protection Switzerland			
without switch			
333.0376	7 x CH type 13 90°	black	2.0 m H05VV-F 3G 1.0 mm² with CH plug type 12
333.0382	7 x CH type 23 90°	black	3.0 m H05VV-F 3G 1.5 mm² with CH plug type 23
19" IT PDU Basic overvoltage protection + mains and frequency filters Switzerland			
without switch			
333.0375	5 x CH type 13 90°	black	2.0 m H05VV-F 3G 1.0 mm² with CH plug type 12
333.0380	5 x CH type 23 90°	black	3.0 m H05VV-F 3G 1.5 mm² with CH plug type 23

IT PDU Basic UK

Art. no.	Version	Colour
19" IT PDU Basic UK		
without switch, 2.0 m, H05VV-F 3G 1.5 mm² with UK plug		
333.804	7 x UK 90° child-proof	grey
with switch, 2.0 m, H05VV-F 3G 1.5 mm² with UK plug		
333.805	6 x UK 90° child-proof	grey

IT PDU Basic France

Art. no.	Version	Colour
19" IT PDU Basic France		
without switch, 2.0 m, H05VV-F 3G 1.5 mm² with right-angled earthing contact plug		
333.418	9 x UTE socket outlets	grey
without switch, rewireable with terminal block		
333.819	8 x UTE socket outlets	grey
with switch		
333.419	8 x UTE socket outlets + switch	grey
19" IT PDU Basic overvoltage protection France		
without switch, 2.0 m, H05VV-F 3G 1.5 mm² with right-angled earthing contact plug		
333.4061	8 x UTE socket outlets	grey
with switch, 2.0 m, H05VV-F 3G 1.5 mm² with right-angled earthing contact plug		
333.838	7 x UTE socket outlets	grey
19" IT PDU Basic overvoltage protection + mains and frequency filters, France		
without switch, 2.0 m, H05VV-F 3G 1.5 mm² with right-angled earthing contact plug		
333.4063	6 x UTE socket outlets	grey
with switch, 2.0 m, H05VV-F 3G 1.5 mm² with right-angled earthing contact plug		
333.840	5 x UTE socket outlets	grey
19" IT PDU Basic with fusing France		
1 x residual current device, 16 A, tripping current 30 mA 2.0 m H05VV-F 3G 1.5 mm² with right-angle earthed plug		
333.4065	6 x UTE socket outlets	grey
1 x MCB 16 A type B, 2.0 m, H05VV-F 3G 1.5 mm² with right-angled earthing contact plug		
333.4066	6 x UTE socket outlets	grey

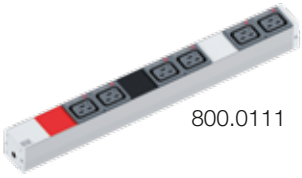


IT PDU BASIC 1U

Power Distribution Units 230 - 400 V / 50 Hz

Development of the IT PDU focused on space-saving PDU integration in the server rack with scope for modular expansion. The high-quality and very robust aluminium profile measures a compact 44 x 47 mm. The space-saving design therefore provides space for data cabling and ventilation for cooling the server rack.
The IT PDUs can be linked together by a simple insertion mechanism, making it easy to combine various different plug versions.

19" IT PDU Basic (3 x 16 A / 400 V / 50 Hz)



Art. no.	Version	Dimensions	
19“ IT PDU Basic			
16 A, 3.0 m H05VV-F 5G 2.5mm² with CEE plug 16A red			
800.0111*	6 IEC320 C19 non-heating appliance socket outlets	482.6x44x47mm	LOCKABLE
16 A, 3.0 m H05VV-F 5G 2.5mm² with end sleeves			
800.0112*	6 IEC320 C19 non-heating appliance socket outlets	482.6x44x47mm	LOCKABLE

Zero U-Space IT PDU Basic (32 A / 230 V / 50 Hz)

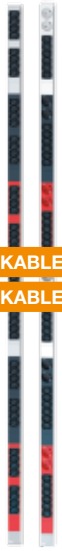
With integrated MCBs

Art. no.	Version	Dimensions	
Zero U-Space IT PDU Basic			
without switch, 3.0 m H05VV-F 3G 4 mm², grey, with CEE plug 32 A blue			
800.0119	20 IEC320 non-heating appliance socket outlets C13 black, 2 x C16A MCB	778x44x47mm	LOCKABLE

Zero U-Space IT PDU Basic (3 x 16 A / 400 V / 50 Hz)

Art. no.	Version	Dimensions	
Zero U-Space IT PDU Basic 16 A			
16 A, 3.0 m 5G 2.5 mm² with CEE plug 16A red			
800.0104*	18 IEC320 C13 non-heating appliance socket outlets, 3 IEC320 C19 non-heating appliance socket outlets	821x44x47mm	LOCKABLE
800.0105	18 IEC320 C13 non-heating appliance socket outlets	821x44x47mm	LOCKABLE
800.0107	15 socket outlets with earthing contact	821x44x47mm	
800.0109	12 IEC320 non-heating appliance socket outlets C13, 6 socket outlets with earthing contact	821x44x47mm	LOCKABLE
16 A, 3.0 m 5G 2.5 mm² with end sleeves			
800.0106*	18 IEC320 C13 non-heating appliance socket outlets	821x44x47mm	LOCKABLE
800.0108*	15 socket outlets with earthing contact	821x44x47mm	
800.0110*	12 IEC320 non-heating appliance socket outlets C13, 6 socket outlets with earthing contact	821x44x47mm	LOCKABLE

Zero U-Space IT PDU Basic (2 x 3 x 16 A / 400 V / 50 Hz)



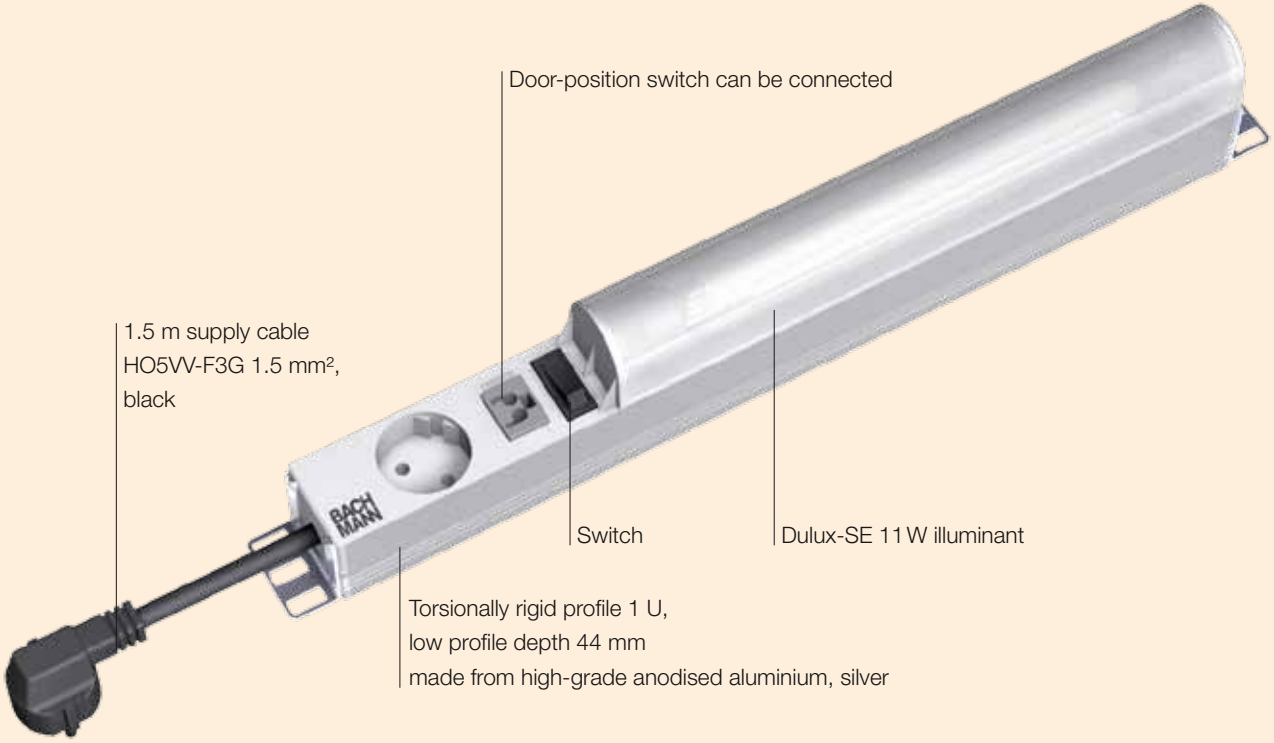
Art. no.	Version	Dimensions	
Zero U-Space IT PDU Basic 32 A			
Two separate power supply cables, each 16 A, 3.0 m 5G 2.5 mm² with CEE plug 16A red			
800.0113*	36 IEC320 non-heating appliance socket outlets C13, 12 socket outlets with earthing contact	1840x44x47mm	LOCKABLE
800.0114*	48 IEC320 C13 non-heating appliance socket outlets	1840x44x47mm	LOCKABLE

Zero U-Space IT PDU Basic (3 x 32 A / 400 V / 50 Hz)

With integrated MCBs

Art. no.	Version	Protection	Dimensions	
Zero U-Space IT PDU Basic 32 A				
32 A, 3.0 m 5G 4 mm² with CEE plug 32A red				
800.0100	12 IEC320 C19 non-heating appliance socket outlets	6 x C16A miniature circuit-breakers	1075 x 44 x 47mm	LOCKABLE
800.0101*	6 IEC320 C19 non-heating appliance socket outlets	6 x C16A miniature circuit-breakers	820x44x47mm	LOCKABLE
800.0102	36 IEC320 C13 non-heating appliance socket outlets	6 x C16A miniature circuit-breakers	1586x44x47mm	LOCKABLE
32 A, 3.0 m 5G 4mm² with end sleeves				
800.0103*	36 IEC320 C13 non-heating appliance socket outlets	6 x C16A miniature circuit-breakers	1586x44x47mm	LOCKABLE

* delivery time on request



CABINET LIGHTING

19" lamp, 1 U

The advantages at a glance

- Lighting for 19" data racks
- With on/off switch
- With built-in socket recess in various country versions
- Electronic ballast unit
- Includes mounting bracket

Max. 16 A / 230 V~

· Power input: 1.5 m H05VV-F 3G 1.50 mm2, black, moulded right-angle plug with dual earthing contact system, plastic, RAL7035, sealed riveted end caps, cannot be opened.

Art. no.	Version
19" lamp, 1 U	**Length: 438.5 mm**
1x switch	
755.000	· 1 socket outlet with earthing contact
755.002	· 1 UTE socket outlet
1x switch, 1x connection point for door-position switch	
755.001	· 1 socket outlet with earthing contact
755.003	· 1 UTE socket outlet

Mounting bracket set with door-position switch	
1 x door-position switch, 1 x fitting set, 1 x switch	
755.004	· Door position switch for 755.001

Mounting brackets made from sheet steel:
4 adjustable screw fastenings, each can be rotated 90° degrees. Can be mounted vertically or horizontally.

PDUs > 1 U ALU

Power Distribution Units

· Torsionally rigid profile > 1 U (52 mm), profile depth 44 mm
· Modular socket outlet design
· Standard socket colour white; other colours black, yellow, red, brown, blue and green also available
· Optionally with illuminated 2-pole switch
· High-quality electronics components built in, e. g. overvoltage protection, mains and frequency filters
· Mounting brackets included

End caps riveted and do not open

Power input: 2.0 m, H05VV-F 3G 1.50 mm², grey, with moulded right angle plug with double earthing contact system, socket outlets, white, set at 35° including mounting brackets

Art. no.	Version
19", 8x earthing contact	**Length: 440 mm**
333.001	· 8 socket outlets with earthing contact, white

19", 7x earthing contact	**Length: 440 mm**
1x switch, green	
333.000	· 7 socket outlets with earthing contact, white · Switch, green

19", 7x earthing contact	**Length: 440 mm**
1x overvoltage protection	
333.004	· 7 socket outlets with earthing contact, white · Overvoltage protection

19", 6x earthing contact	**Length: 440 mm**
1x overvoltage protection, 1x switch, green	
333.005	· 6 socket outlets with earthing contact, white · Switch, green · Overvoltage protection

19", 5x earthing contact	**Length: 440 mm**
1x overvoltage protection + mains and frequency filters	
333.002	· 5 socket outlets with earthing contact, white · Overvoltage protection + mains and frequency filters

19", 4x earthing contact	**Length: 440 mm**
1x overvoltage protection + mains and frequency filters, 1x switch, green	
331.0202	· 4 socket outlets with earthing contact, white · Switch, green · Overvoltage protection + mains and frequency filters

PDUs > 1 U PVC

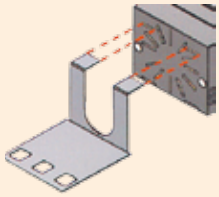
Power Distribution Units

· Torsionally rigid profile > 1 U (52 mm) in high-quality PVC, profile depth 44 mm
· Optionally with illuminated 2-pole switch
· High-quality electronics components built in, e.g. overvoltage protection, mains and frequency filters
· Mounting brackets included

End caps riveted and do not open

Power input: 2.0 m, H05VV-F 3G 1.50 mm², grey, with moulded right angle plug with dual earthing contact system, sockets light grey RAL7035, set at 35°, mounting brackets included

Art. no.	Version
19", 8x earthing contact	**Length: 440 mm**
333.601	· 8 socket outlets with earthing contact
19", 7x earthing contact	**Length: 440 mm**
1x switch, green	
333.600	· 7 socket outlets with earthing contact · Switch, green
19", 7x earthing contact	**Length: 440 mm**
1x overvoltage protection	
333.604	· 7 socket outlets with earthing contact · Overvoltage protection
19", 6x earthing contact	**Length: 440 mm**
1x overvoltage protection, 1x green switch	
333.605	· 6 socket outlets with earthing contact · Switch, green · Overvoltage protection
19", 5x earthing contact	**Length: 440 mm**
1x overvoltage protection + mains and frequency filters	
333.602	· 5 socket outlets with earthing contact · Overvoltage protection + mains and frequency filters



Mounting brackets in stainless steel:
Fastening in the slots of the end cap enables the unit to be fitted at various heights and angles.

2 x 2 screw holes for mounting
15 mm spacing between socket inserts
With integrated terminal for power cables and additional outlet for separate earth conductor. Screwed and rewireable
Additional screw holes for mounting in 19" data racks
Robust plastic profile, very torsionally rigid
Earthing contact socket outlets are set at 90°.
2-pole illuminated rocker switch, 16 A
2.0 m H05VV-F 3G 1.5 mm²
supply cable with moulded right angle plug with dual earthing contact system

TRADESMAN'S STRIP

Robust, professional quality plastic strip.

With increased distance between socket outlets, allowing easy positioning of mains adaptor plugs and operating equipment.

The advantages at a glance

- Modern, technical design
- End caps with additional screw holes for mounting in data racks
- Additional earth conductor can be connected without opening the housing
- Strips available in 19" dimensions

Tradesman's strip set at 90°

· Supply cable: 2.0 m H05VV-F 3G 1.50 mm², black with right angle plug with earthing contact
· Socket inserts, black, 15 mm spacing between sockets

Art. no.	Version	Dimensions: (L x W x H)	
Power strip 90°			
Without switch			
300.000	· 6 socket outlets with earthing contact	· Approx. 445 x 74 x 45 mm	19"
300.001	· 9 socket outlets with earthing contact	· Approx. 617 x 74 x 45 mm	
300.002	· 12 socket outlets with earthing contact	· Approx. 790 x 74 x 45 mm	
1x rocker switch, green			
300.003	· 6 socket outlets with earthing contact	· Approx. 445 x 74 x 45 mm	19"
300.004	· 9 socket outlets with earthing contact	· Approx. 617 x 74 x 45 mm	
300.005	· 12 socket outlets with earthing contact	· Approx. 790 x 74 x 45 mm	
1x overvoltage protection, 1x rocker switch, green			
300.011	· 6 socket outlets with earthing contact	· Approx. 490 x 74 x 45 mm	
1x overvoltage protection + mains and frequency filters, 1x rocker switch, green			
300.012	· 6 socket outlets with earthing contact	· Approx. 575 x 74 x 45 mm	

Overvoltage protection with filter
Overvoltage protection – conforms to EN 61643-1:2005, EN 61643-11:2002 + A11:2007, type 3, discharge current 6.5 kA, response time < 25 nS. Suitable for 16A (miniature fuse on request) with varistors, temperature fuse, gas discharge arrester, visual LED function and failure indicator (acoustic signalling also available on request).
Mains and frequency filters conforming to VDE 0565-3:05-2006, damping diagram on data sheet.

Tradesman's strip set at 35°

· Supply cable: 2.0 m H05VV-F 3G 1.50 mm², black
· Screwing dimension 465 mm, socket outlets set at 35°

Art. no.	Version	Dimensions: (L x W x H)	
Power strip 35°			
Without switch			
300.006	· 8 socket outlets with earthing contact	· Approx. 482.6 x 74 x 45 mm	19"
1x rocker switch, green			19"
300.007	· 7 socket outlets with earthing contact	· Approx. 482.6 x 74 x 45 mm	

BLUENET

Power Distribution Unit

BlueNet is the intelligent energy management system with a measurement accuracy of +/- 1 %. Measurement on the neutral conductor also provides increased safety. Alarm values for current, voltage and the phase angle can be individually set for early detection of physical sources of danger. Temperature sensors or humidity sensors can also be connected.
All BlueNet Network series products have an integrated Ethernet interface and can be connected to monitoring systems via SNMP.

Power monitoring and display

BlueNet creates the optimum conditions for efficient power management. In order to monitor and control energy costs it is first necessary to know where and when they arise. BlueNet provides all relevant data such as energy consumption, voltage, power and more.

Capacity planning

Know what's running. By measuring individual loads, administrators can carry out effective planning for their data centre. They can then distribute loads so well that failures due to circuit overloads no longer occur.

Security

Automated notification when threshold values are reached informs the user by e-mail and SNMP before a fault can develop. Restarts controlled by web link further increase availability and flexibility.

Network-based evaluation and control

The data captured by BlueNet is evaluated centrally on the network. Thus the user obtains not only an exact energy cost overview but also information on available load reserves and on possible intervention in the power supply.

Save energy

For an exact analysis of power consumption in data centres, BlueNet is the ideal solution. It enables administrators to select servers for a virtualisation or for decommissioning. By performing a before/after comparison of energy consumption, savings on power costs can be reached in budget planning.

Features	Metered	Metered Plus	Monitored	Monitored Plus	Switched	Managed
Parameter						
Current	●	●	●	●		●
Voltage		●	●	●		●
Phase angle	–	●	–	●	–	●
Frequency	–	●	●	●	–	●
Energy	–	●	●	●	–	●
Reactive power	–	–	●	●	–	●
Effective power	–	●	●	●	–	●
Apparent power	–	–	●	●	–	●
Power factor	–	–	●	●	–	●
Neutral conductor monitoring	–	–	depends on model	depends on model	–	depends on model
Measurement per phase	●	●	●	●	–	●
Display						
Type	LCD	LCD	TFT / 2“	LCD	LCD	LCD
Display can be rotated using software	–	–	●	–	–	–
Variable options for display of data	–	–	●	–	–	–
Sensors						
Integrated temperature sensor	–	–	●	–	–	–
Inputs for external sensors	–	–	2	–	–	–
Switching						
Can be switched individually	–	–	–	–	●	●
Switching status monitoring	–	–	–	–	O	O
Network						
Ethernet (10/100 Mbit/s)	–	–	●	●	●	●
ModBus TCP/IP	–	–	–	O	O	O
HTTP	–	–	●	●	●	●
HTTPS	–	–	–	●	●	●
SSH	–	–	–	●	●	●
DHCP	–	–	●	●	●	●
SMTP	–	–	–	●	●	●
SNMP	–	–	●	●	●	●
Syslog	–	–	–	●	●	●
NTP	–	–	●	●	●	●
Alarm (SMTP, SNMP)	–	–	–	●	●	●

● yes – no / O optional

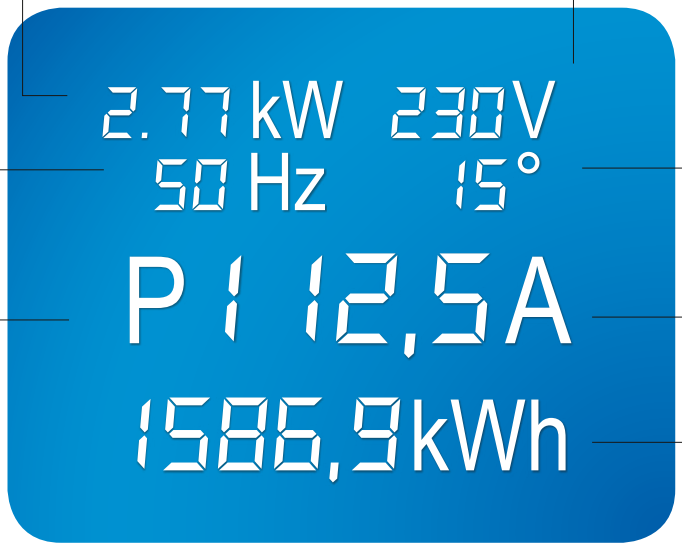
BlueNet Metered Plus / Monitored Plus / Managed

Power measurement (kW)
The effective power drawn by the consumers, taking the phase angle into account. Power consumption of the connected devices.

Mains voltage (V)
Displays the voltage of the incoming mains supply to which the power meter is connected.

Frequency (Hz)
Current mains frequency

Phase angle
Displays the phase shift in the power network.



Current (A)
The current now being drawn by the connected devices.

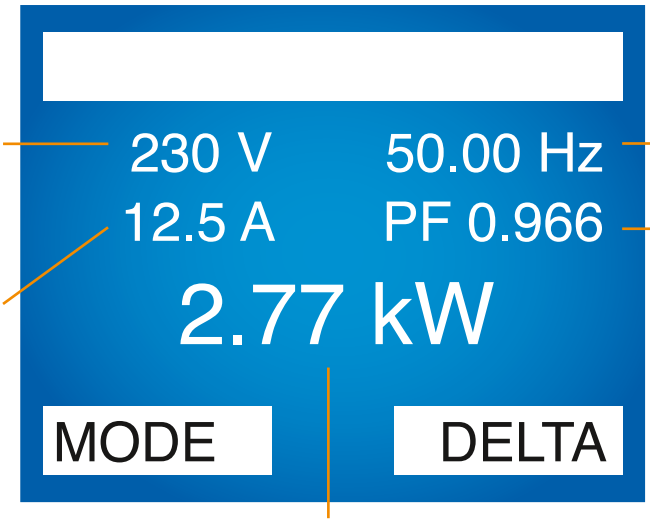
Phase indicator (P)
Shows the phase (1, 2 or 3) currently being measured. Display moves automatically through the phases showing their respective measured values.

Total energy consumption (kWh)
The total energy consumption shown on the display is calculated taking the phase angle into account.

BlueNet Monitored

Mains voltage (V)
Displays the voltage of the incoming mains supply to which the power meter is connected.

Current (A)
The current now being drawn by the connected devices.



Frequency (Hz)
Current mains frequency

Power factor
Displays the power factor.

Power measurement (kW)
The effective power drawn by the consumers, taking the phase angle into account. Power consumption of the connected devices.

BlueNet Metered Series

The BlueNet Metered series display:
capture and evaluate the most important parameters at a glance.

The advantages at a glance

- Current measurement
- Voltage measurement
- Phase angle measurement
- Effective power calculated with regard to phase angle
- Frequency measurement
- BlueNet display
- Accuracy class 1

BlueNet Metered (16 A / 230 V / 50 Hz)

· Integrated current measurement for up to 32 A (depending on version)
· 3-digit current readout on illuminated LCD display
· Precision +/- 1%
· End caps riveted and do not open
· Includes mounting brackets and screws
· Plastic, light grey, aluminium profile silver

Art. no.	Version	Dimensions (L x W x H)	
BlueNet Metered			
integrated ammeter, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact			
333.808	7 socket outlets with earthing contact	approx. 482.6 x 44 x 58	
333.810	8 IEC320 C13 non-heating appliance socket outlets	approx. 482.6 x 44 x 58	LOCKABLE
333.862	7 IEC320 C19 non-heating appliance socket outlets	approx. 482.6 x 44 x 58	
333.864	7 UTE socket outlets	approx. 482.6 x 44 x 58	
integrated ammeter, 2.0 m H05VV-F 3G 1.00 mm², black, with CH plug type 12			
333.0422	7 CH socket outlets type 13	approx. 482.6 x 44 x 58	

BlueNet Metered Plus (16 A / 230 V / 50 Hz)

· Integrated measurement of: current, effective power, voltage, frequency, phase angle and energy
· Indication on illuminated LCD
· Resettable energy meter (stores latest value even when no power connected)
· Precision +/- 1%
· End caps riveted and do not open
· Includes mounting brackets and screws
· Plastic, light grey, aluminium profile silver

Art. no.	Version	Dimensions (L x W x H)	
BlueNet Metered Plus			
integrated power metering, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact			
329.213	6 socket outlets with earthing contact	approx. 482.6 x 44 x 58	
329.214	8 IEC320 C13 non-heating appliance socket outlets	approx. 482.6 x 44 x 58	LOCKABLE
329.215	6 IEC320 C19 non-heating appliance socket outlets	approx. 482.6 x 44 x 58	

329.213

329.214

329.215

BlueNet Network Series

The data centre's mains supply is monitored and remotely controlled from the comfort of your desk with BlueNet Network series products. BlueNet increases data centre availability, minimises down times and cuts costs.
The BlueNet Network series monitors current, voltage and power.
This allows resources to be planned efficiently and alarms to be issued in the event of a fault.

BLUENET MONITORED

Power Distribution Units

- Integrated measurement of current, voltage, frequency, effective, apparent and reactive power and power factor
- Integrated Ethernet connection
- Operated via a web browser
- Supported protocols include : HTTP; SNMP
- Integrated temperature sensor
- Up to two sensors can be connected
- Very compact design (W x D: 44 mm x 47 mm)
- Robust aluminium housing
- High-resolution OLED display
- Display can be rotated for easier readability by means of software

329.3009

BlueNet Monitored PDU 1-phase (16 A / 230 V / 50 Hz)

Art. no.	Version	Dimensions	
BlueNet Monitored 1-phase			
2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact			
329.3009	6 socket outlets with earthing contact	482.6x44x47mm	
329.3010	8 IEC320 C13 non-heating appliance socket outlets	482.6x44x47mm	LOCKABLE
329.3011*	6 IEC320 C13 non-heating appliance socket outlets, 2 IEC320 C19 non-heating appliance socket outlets	482.6x44x47mm	LOCKABLE

BlueNet Monitored PDU 3-phase (3 x 16 A / 400 V / 50 Hz)

Art. no.	Version	Dimensions	
BlueNet Monitored 3-phase			
3.0 m H05VV-F 5G 2.50 mm², black, with CEE plug 16A red			
329.3012	36 IEC320 non-heating appliance socket outlets C13, 6 socket outlets with earthing contact	1757,7x44x47mm	LOCKABLE
329.3013	36 IEC320 C13 non-heating appliance socket outlets, 6 IEC320 C19 non-heating appliance socket outlets	1757,7x44x47mm	LOCKABLE
329.3014	42 IEC320 C13 non-heating appliance socket outlets	1675x44x47mm	LOCKABLE

BlueNet Monitored accessories

Art. no.	Description
BlueNet Monitored accessories	
329.3102	Temperature sensor
329.3104*	Combined temperature and humidity sensor
329.3105*	USB cable for connecting PDU directly to PC

329.3012

* delivery time on request

BLUENET MONITORED

Upgrade modules

The BlueNet Monitored upgrade modules are used to upgrade intelligent modules in an existing power distribution system. Simple integration reduces the work and costs involved in installation to a minimum. Upgrade modules can be supplied with both integrated Ethernet interface and Power Line communications adaptor. The Power Line modules further simplify integration by reducing the cabling required.

BlueNet Monitored 19" upgrade modules (400 V / 50 Hz)

Art. no.	Input	Output	Dimensions (L x W x H)
BlueNet Monitored 19" upgrade module with integrated Ethernet connection			
329.3001*	Wago X-Com 3 phases 32A	Wago X-Com 3 phases 32A	482.6 x 44 x 47mm
329.3003*	CEE red 3 phases 16A	3 IEC320 C19 16A	482.6 x 44 x 47mm
329.3004	CEE red 3 phases 16A	CEE red 3 phases 16A	482.6 x 44 x 47mm

BlueNet Monitored Power Line upgrade modules (400 V / 50 Hz)

Art. no.	Input	Output	Dimensions (L x W x H)
BlueNet Monitored 19" upgrade module with Power Line communications module			
329.3005*	Wago X-Com 3 phases 32A	Wago X-Com 3 phases 32A	482.6 x 44 x 47mm
329.3007*	CEE red 3 phases 16A	3 IEC320 C19 16A	482.6 x 44 x 47mm
329.3008*	CEE red 3 phases 16A	CEE red 3 phases 16A	482.6 x 44 x 47mm

BlueNet Power Line Concentrator

· The BlueNet Power Line Concentrator collects the data from the Power Line PDUs and supplies it to the network via the Ethernet interface.

Art. no.	Version
BlueNet Concentrator with Power Line communications module	
329.3016*	1 phase / 230 V
329.3017*	3 phase / 400 V

* delivery time on request

Powerline: configuration, price and delivery time available on request. Powered by E3METER

BLUENET MONITORED PLUS

Power Distribution Units

· Integrated measurement of current; effective power; voltage; frequency and phase angle
· Integrated Ethernet connection
· Operated via a web browser
· Supported protocols include: HTTP, HTTPS, SNMP, SMTP, NTP, SSH
· Robust aluminium housing
· Illuminated LCD

BlueNet Monitored Plus PDU 1-phase (16 A / 230 V / 50 Hz)

Art. no.	Version	Dimensions (L x W x D)
BlueNet Monitored Plus 1-phase		
19", 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
329.600	6 socket outlets with earthing contact	482.6 x 44 x 199 mm
329.601	8 IEC320 C13 non-heating appliance socket outlets	482.6 x 44 x 199 mm
329.602	6 IEC320 C19 non-heating appliance socket outlets	482.6 x 44 x 199 mm

LOCKABLE

BlueNet Monitored Plus PDU 3-phase (3 x 16 A / 400 V / 50 Hz)

Art. no.	Version	Dimensions (L x W x D)
BlueNet Monitored Plus 3-phase		
3.0 m H05VV-F 5G 2.5 mm², black, with CEE plug 16 A red		
329.615	9 IEC320 non-heating socket outlets C19	695 x 44 x 199 mm
329.617	9 socket outlets with earthing contact	695 x 44 x 199 mm
3.0 m, H05VV-F 5G 2.5 mm² black, with end sleeves		
329.616*	9 IEC320 non-heating socket outlets C19	695 x 44 x 199 mm
329.618*	9 socket outlets with earthing contact	695 x 44 x 199 mm

BlueNet Monitored Plus PDU 3-phase (3 x 32 A / 400 V / 50 Hz)

In the 32 A versions of the Monitored Plus PDUs, each 32 A per phase is split over two groups of pots and two MCBs.

Art. no.	Version	Dimensions (L x W x D)
BlueNet Monitored Plus 3-phase		
3.0 m H05VV-F 5G 4 mm², black, with CEE plug 32A red		
329.604	24 IEC320 C13 non-heating appliance socket outlets, 6 IEC320 C19 non-heating appliance socket outlets	1713 x 44 x 207 mm
329.605	12 IEC320 C19 non-heating appliance socket outlets	1202 x 44 x 207 mm
329.606	24 socket outlets with earthing contact	1713 x 44 x 207 mm

LOCKABLE

BlueNet Monitored Plus, 19"

* delivery time on request

BLUENET SWITCHED

Power Distribution Units

· Socket outlets can be switched individually
· Safe zero-voltage switching
· Integrated LED switching status check per port
· Integrated Ethernet connection
· Operated via a web browser
· Supported protocols include: HTTP, HTTPS, SNMP, SMTP, NTP, SSH
· Robust aluminium housing

329.704

BlueNet Switched PDU 1-phase (16 A / 230 V / 50 Hz)

	Art. no.	Version	Dimensions (L x W x D)
	BlueNet Switched 1-phase		
	19”, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
LOCKABLE	329.700	8 IEC320 C13 non-heating appliance socket outlets	482.6 x 44 x 199 mm
	329.702	6 socket outlets with earthing contact	482.6 x 44 x 199 mm
	Zero-U Space, 2.0 m H05VV-F 3G 1.50 mm², black, with right angle plug with earthing contact		
LOCKABLE	329.701	16 IEC320 C13 non-heating appliance socket outlets	692 x 44 x 199 mm

BlueNet Switched PDU 3-phase (3 x 32 A / 400 V / 50 Hz)

In the 32 A versions of the Switched PDUs, each 32 A phase is split over two groups of pots with two MCBs.

	Art. no.	Version	Dimensions (L x W x D)
	BlueNet Switched 3-phase		
	3.0 m Ölflex 3G 4 mm², black, with CEE plug 32A red		
LOCKABLE	329.703	24 IEC320 C13 non-heating appliance socket outlets, 6 IEC320 C19 non-heating appliance socket outlets	1713 x 44 x 207 mm
	329.704	12 IEC320 C19 non-heating appliance socket outlets	1202 x 44 x 207 mm
	329.705	24 socket outlets with earthing contact	1713 x 44 x 207 mm

BLUENET MANAGED

Power Distribution Units

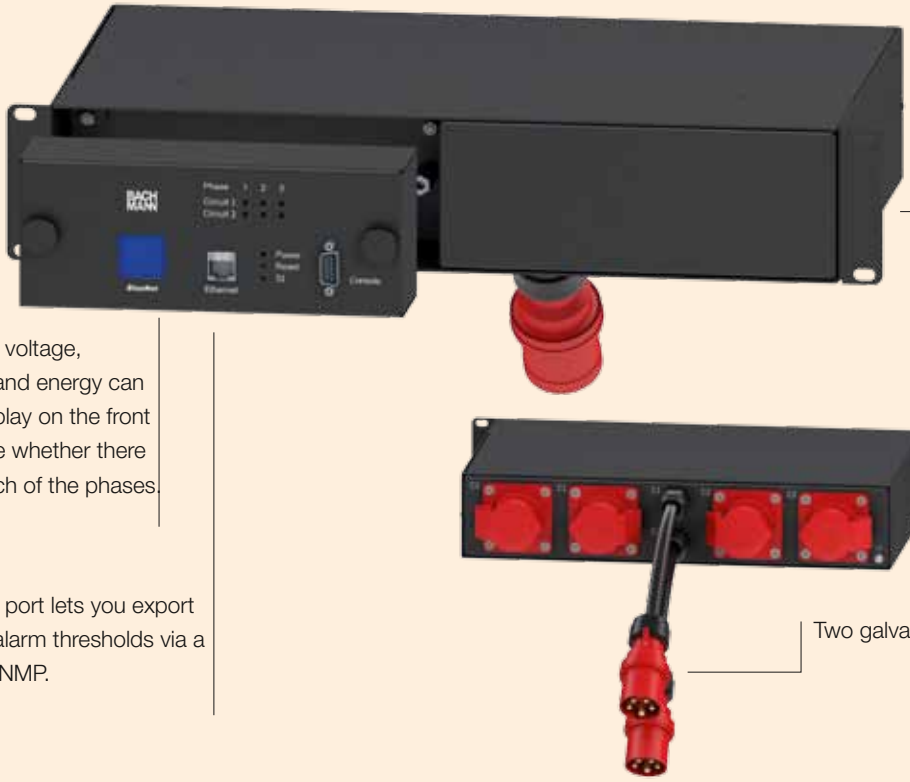
· Socket outlets can be switched individually
· Safe zero-voltage switching
· Integrated LED switching status check per port
· Integrated Ethernet connection
· Operated via a web browser
· Integrated measurement of current, effective power, voltage, frequency and phase angle
· Supported protocols include: HTTP, HTTPS, SNMP, SMTP, NTP, SSH
· Robust aluminium housing
· Illuminated LCD

BlueNet Managed PDU 3-phase (3 x 32 A / 400 V / 50 Hz)

In the 32 A versions of the Managed PDUs each 32 A phase is split over two groups of pots with two MCBs.

Art. no.	Version	Dimensions (L x W x D)	
BlueNet Managed 3-phase			
3.0 m H05VV-F 5G 4 mm², black, with CEE plug 32A red			
329.800	24 IEC320 C13 non-heating appliance socket outlets, 6 IEC320 C19 non-heating appliance socket outlets	1713 x 44 x 207 mm	LOCKABLE
329.801	12 IEC320 C19 non-heating appliance socket outlets	1202 x 44 x 207 mm	
329.802	24 socket outlets with earthing contact	1713 x 44 x 207 mm	

The measurement module can be removed in use without interruption of the supply to the connected devices.



Only two height units are required.

Current, effective power, voltage, frequency, phase angle and energy can be read from the LC display on the front of the unit. LEDs indicate whether there is voltage present on each of the phases.

A built-in Ethernet port lets you export readings and set alarm thresholds via a web browser or SNMP.

Two galvanically isolated infeeds

BLUENET POWER UNIT

Modular power distribution in data centres

BlueNet POWER UNIT offers a modular platform for power distribution in data centres. The POWER UNIT basic unit provides power distribution in the rack. If required, the measurement module can be upgraded or replaced during operation without interruption to the supply.

BLUENET POWER UNIT

Power Distribution Units

· Integrated measurement of current, effective power, voltage, frequency and phase angle
· Two galvanically isolated power supply units
· Integrated Ethernet connection
· Can be operated by web browser, SNMP or serial interface
· Can optionally also be controlled by ModBus TCP (on request)
· Supported protocols include: HTTP, HTTPS, SNMP, SMTP, NTP, SSH
· Robust enclosure in steel plate
· Illuminated LC display
· Measurement module can be swapped in use without interruption to supply

BlueNet Power Unit base unit (measurement module is available separately)

Art. no.	Input	Output
BlueNet Power Unit		**435.6 x 88 x 317 mm**
2 x 1 phase 230 V		
329.9007	2 x 3.0m CEE 16 A / 230 V	4 x CEE 16 A / 230 V
329.9014	2 x 3.0m CEE 16 A / 230 V	2 x CEE 16 A / 230 V
329.9015	2 x C20 16 A / 230 V	4 x C19 16 A / 230 V
329.9016	2 x C20 16 A / 230 V	2 x C19 16 A / 230 V
2 x 3 phase 400 V		
329.9008	2 x 3.0m CEE 16 A / 400 V	4 x CEE 16 A / 400 V
329.9013	2 x 3.0m CEE 16 A / 400 V	2 x CEE 16 A / 400 V
329.9009	2 x 3.0m CEE 32 A / 400 V	4 x CEE 32 A / 400 V
329.9012	2 x 3.0m CEE 32 A / 400 V	2 x CEE 32 A / 400 V

329.9007

329.9007

329.9014

329.9015

329.9008

329.9008

329.9013

BlueNet Power Unit measurement module

Art. no.	Version
BlueNet Power Unit Monitored Plus	
with integrated Ethernet interface	
329.9010	16 - 32 A / 230 V
329.9011	16 - 32 A / 400 V

ACCESSORIES

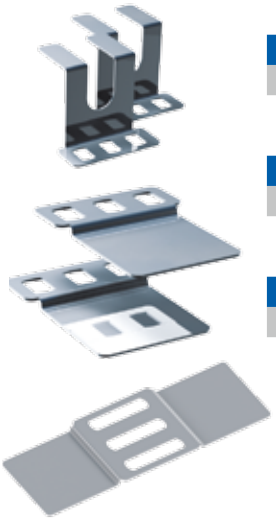
Mounting brackets for standard 1 U profile

· The brackets are screwed to the PDU end cap using a screw connection (screws provided).

Art. no.	Version
1 U mounting brackets	
19", Zero-U Space	
940.142	· Mounting brackets left and right
> 1 U mounting brackets	
19", Zero-U Space	
940.096	· Mounting brackets left and right

Mounting brackets for VM profile variant / Zero U-Space installation

· Power strip is fixed by insertion into the profile groove provided.
· No additional screws required.



Art. no.	Version
1 U mounting brackets	
19", Zero-U Space	
940.141	· Mounting brackets left and right
1 U mounting brackets	
Zero-U Space	
940.143	· Mounting brackets left and right
1 U link	
Zero-U Space	
800.0053	· For connecting two vertically fitted PDUs

Fixing brackets in sheet steel for 1 U:
4 adjustable screw fastenings, each can be rotated 90° degrees, vertical installation also possible.

Locking clip

Art. no.	Version
Locking clips	
940.103	· Locking clip, red, for IEC 320 C13 non-heating appliance socket outlets, pack of 12.

Connecting cable for interlock

Art. no.	Version
Connecting cable for interlock	
356.119	· Connecting cable, 0.5 m, black, H05VV-F 3G 1.0 mm² · End 1: moulded non-heating appliance plug IEC C14 · End 2: moulded non-heating appliance socket outlet IEC C13
356.120	· Connecting cable, 1.0 m, black, H05VV-F 3G 1.0 mm² · End 1: moulded non-heating appliance plug IEC C14 · End 2: moulded non-heating appliance socket outlet IEC C13

Locking cap IEC320 C13 & C19

Art. no.	Version
Connecting cable for interlock	
800.0050	C19 locking caps, 10 items incl. unlocking tool
800.0051	C13 locking caps, 10 items incl. unlocking tool
800.0052	Unlocking tool for locking cap

Shift inhibitor

· For protection against unintentional activation of power or earth-leakage circuit breakers

Art. no.	Version
Shift inhibitor	
940.140	· Activation lock to protect cutouts and single-pole switches against operation of switch lever where unauthorised or dangerous

Data cables –> Transfer of data within various categories

Art. no.	Length	Version
CAT5e patch cable plug/plug		
918.003	1.0 m	· CAT5e cable, shielded, colour grey
940.052	3.0 m	· Conforms to ISO / IEC 11801 and EN 50173
940.053	5.0 m	· Ends 1 and 2: RJ45 plug with kink protection nozzle and protective tongue for interlock
		· Suitable for e.g. CAT5e socket / socket 940.057

CAT6 patch cable plug / plug		
940.040	3.0 m	· CAT6 cable, shielded, colour grey
940.041	5.0 m	· Conforms to ISO / IEC 11801 and EN 50173
		· Ends 1 and 2: RJ45 plug with kink protection nozzle and protective tongue for interlock
		· Suitable for e.g. CAT6 socket / socket 940.044

CAT6a patch cable plug / plug		
918.006	1.0 m	· CAT7 cable, shielded, colour black
918.007	3.0 m	· Conforms to IEC 61156-6
918.008	5.0 m	· Ends 1 and 2: RJ45 Hirose TM12 CAT6a plug with kink protection nozzle and unlocking tongue
		· Suitable for e.g. CAT6 socket / socket 940.044

CAT6a patch cable plug		
918.033	3.0 m	· CAT7 cable, shielded, colour black
918.034	5.0 m	· Conforms to IEC 61156-6
		· End 1: RJ45 Hirose TM12 CAT6a plug with kink protection nozzle and unlocking tongue. End 2: CAT6a TKM 10 Gb Keystone socket.
		· Fits into Keystone frames 917.000 / 917.001 / 917.061 / 917.062

RJ12 patch cable plug / plug		
940.089	3.0 m	· RJ12 cable, unshielded, colour black
		· Conforms to ISO / IEC 11801 and EN 50173
		· Ends 1 and 2: RJ12 plug with kink protection nozzle
		· Suitable for e.g. RJ12 socket / socket 940.085

USB connecting cable

Art. no.	Length	Version
USB A/B connecting cable		
940.046	3.0 m	· USB A/B connecting cable, colour black
		· End 1: plug A
		· End 2: plug B
		· Can be used with custom modules with USB B socket (e.g. 917.018)

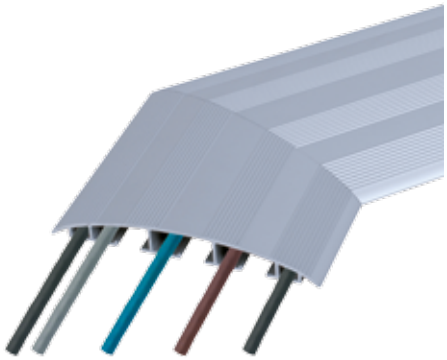
Flexible cable management system

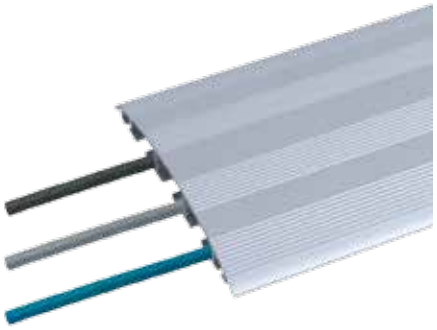
· The chain links are safe to step on and break-proof, and can be moved about relative to one another.
· 2 connector shoulders allow forces to be transmitted (including torque and shear forces).
· Special geometry allows individual cables to exit through the sides without risk of crushing.

Art. no.	Colour	Version
KABELSCHLANGE® Classic		
930.030	Black	· For horizontal and vertical cable routing
930.031	Silver	· 3-chamber system to separate low-current, data and power lines · 46 chain links, W x H: approx. 54 x 23 mm · Length (pulled apart): approx. 100 cm · Length (pushed together): approx. 72 cm
KABELSCHLANGE® Cube		
930.058	Black	· For horizontal and vertical cable routing
930.059	Silver	· 2-chamber system to separate low-current, data and power lines · 34 chain links, W x H: approx. 55 x 25 mm · Length (pulled apart): approx. 100 cm · Length (pushed together): approx. 69 cm
KABELSCHLANGE® Pro		
930.032	Black	· For horizontal cable routing
930.033	Silver	· Increased resistance to treading on even in high foot traffic areas · 5 chain links can withstand short-term loads of up to 120 kg · 2-chamber system to separate data and power cables · Can also be connected directly to KABELSCHLANGE®Classic · 34 chain links, W x H: approx. 90 x 24 mm · Length (pulled apart): approx. 100 cm · Length (pushed together): approx. 69 cm
KABELSCHLANGE® Premium Set		
930.049	Black	· For vertical cable routing to high-quality office furniture
930.050	Silver	· Visually attractive premium set: 16 chain links, W x H: approx. 35 x 70 mm 1x metal base plate in appropriate colour 1x end piece for fixing to desk and screws · The chain links can be pushed together to form an enclosed self-locking, elliptical cable duct · 2-chamber system to separate data and power cables · Length incl. base plate and desk fixing approx. 78 cm · Length without accessories approx. 75 cm · Length (pushed together): approx. 59 cm per set
KABELSCHLANGE® Easy-Clip		
For KABELSCHLANGE® Classic, Cube and Pro		
930.037	Black	· Clip for attaching chain flexibly and without tools to power columns (e. g. Power Tower) · Plug in the clip at the end of the KABELSCHLANGE® and attach the wire bracket to the terminals on the power column
930.038	Silver	
KABELSCHLANGE® Easy-Clip for floor box		
930.036	For KABEL-SCHLANGE® Classic	· Patented adaptor for connecting KABELSCHLANGE® cable management systems to all common floor outlets · Clip with elongated holes and fastening holes, can be used for horizontal or vertical mounting on furniture or in sill-type trunking by disconnecting components that are not needed · Clip, pushes onto bottom of the last chain link · Clip bends flexibly on impact (e. g. when floor is being cleaned) thereby preventing damage to the outlet or clip
930.054	For KABEL-SCHLANGE® Pro and Cube	

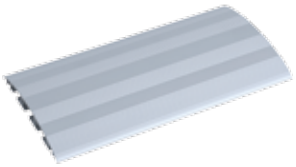
Art. no.	Colour	Version
KABELSCHLANGE® Easy-Fix 90S		**Dimensions (L x W x H) 48 x 20 x 20 mm**
For KABELSCHLANGE® Classic, Cube and Pro		
930.055	Black	· Bracket for vertical fixing e.g. to undersides of desk/table tops · D = 1.5 mm; 2 drill holes, diameter = 4 mm. Hole spacing 30 mm
KABELSCHLANGE® Easy-Stop		
930.042	Black	· Cable grip to fix cables (to ensure cabling complies with standards) securely and tightly to the fixing point · Suitable for horizontal and vertical fixing · Can be used as an individual component or combined with any Easy-Line© rail · With connector clips to connect to system regardless of direction
KABELSCHLANGE® Easy-Line©		
For KABELSCHLANGE® Classic and Pro curved and straight runs		
930.039	Straight	· Ideal for mounting on walls or ceilings · Can also be used for horizontal desk routing, as sill-type trunking or skirting · 4 Easy-Line© straight line runs are sufficient for one metre KABELSCHLANGE® Classic · Please ensure that an Easy-Stop© cable grip is fitted at all free ends
930.040	90° curved section Radius 150 mm	
930.041	22.5° curved section	
KABELSCHLANGE® cable bracket set with cable grip		
930.051	Black	· Cable clamp set, screws onto underside of desk/table top · The cable bracket enables cables to be routed onwards underneath the top of the desk or table · Contents: - Cable clamp incl. 2 fixing screws (also for thin desk/table tops) - Cable grip with adjusting screw
KABELSCHLANGE® Easy-Switch©		
For KABELSCHLANGE® Classic, Cube and Pro		
930.034	Black	· The Easy-Switch© distributor turns the KABELSCHLANGE® into a networkable cable management system · The adaptor chain links mean that Easy-Switch© can be connected to the KABELSCHLANGE ® without tools · **Note:** For use with KABELSCHLANGE® Pro please also order Classic chain links for linking to the distributor
930.035	Silver	
KABELSCHLANGE® Easy-Switch©		
For KABELSCHLANGE® Classic, Cube, Pro and Premium		
930.057	Black	· 4-way distributor with 3x 120° horizontal feeder sockets for KABELSCHLANGE® Classic, Cube and Pro · 1 vertical coupling point for KABELSCHLANGE® Premium · Incl. fixing screw and solid base plate (Easy-Floor Premium) · Set contains 4 KS Cube coupling links for the connection of KABELSCHLANGE® Pro
KABELSCHLANGE® Easy-Cap©		
930.044	Black	· Blank cap for sealing unused connection points on Easy-Switch©
930.045	Silver	

BRIDGE – the cable duct

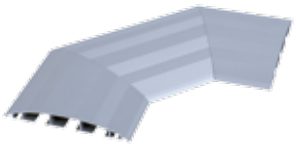




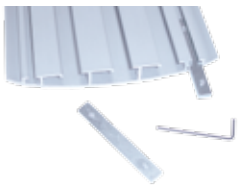
Art. no.	Length	Version
CABLE BRIDGE		**Dimensions: (W x H) 146 x 9 mm**
Cable duct, straight		
930.060	1.0 m	· Anodised aluminium profile, with rippled surface to reduce slipping
930.061	2.0 m	· 3-chamber system allowing power and data cables to be routed separately
		· Can be taped (using double-sided tape) or screwed into place on the floor (see fixing accessories)



CABLE BRIDGE		
Bracket for cable duct		
930.062		· Bracket in anodised aluminium
930.063		



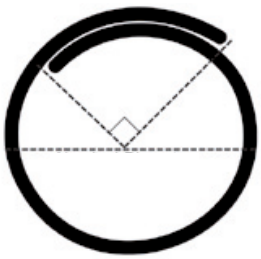
CABLE BRIDGE		
Linking element for cable duct		
930.064	Straight	· Link for joining straight cable ducts
		· Screws into place with integral screws
		· 2 items



CABLE BRIDGE		
Fixing accessories for cable duct		
930.065	Straight	· For screwing down cable ducts at the ends
		· 4 items

Wrap textile-fibre sleeves

Wrap textile-fibre sleeves bundle and protect cables and wires in data centre and office environments. The elastic braided sheath with its monofilament fibres assures fire and abrasion resistance and is thus also ideal for professional and industrial use.
Wrap textile-fibre sleeves are aesthetically appealing and can also be retrofitted to cable sets without difficulty.



Automatic Wrap

The unique, sectional, semi-rigid weave makes Automatic Wrap an ideal solution for situations in which simple installation is required. Its side opening allows numerous applications to be accommodated and can easily be closed again without the need for additional material such as adhesive tape. The PET braid is light and flexible. The edge, which protrudes by 25 %, provides cover for the cable extensions and connections inside. Automatic Wrap can be routed around narrow edges without opening or becoming warped. Unlike rigid cable ducts, it does not impair the flexibility of the cable harness.

The advantages at a glance

- Simple, low-cost installation with minimal labour
- More flexible than coiled or wound solutions
- 25 % overlap for secure cable bundling
- Resistant to chemicals and solvents
- Halogen-free
- Resistant to cuts and abrasions
- Retains its shape within operating temperature range -75 °C to +125 °C

Art. no.	Length	Version
Automatic Wrap		
Dimensions: diameter 2.54 cm = 25.40 mm		
930.900	1.0 m	· Black
930.901	2.0 m	· Black
930.902	3.0 m	· Black

Automatic Wrap		
Dimensions: diameter 5.08 cm = 2 inches		
930.903	1.0 m	· Black
930.904	2.0 m	· Black
930.905	3.0 m	· Black

Manual Wrap in colour

Manual Wrap is an exclusive product that offers the ideal solution for numerous applications. A strong Velcro fastener makes the application simple to fit. The entire length of the run remains accessible after installation, e.g. for adding or removing cables or connections. The stretchable woven braid allows the Manual Wrap to bundle and sheathe cables of various diameters. Manual Wrap can also wrap around applications with non-standard shapes. It can be cut cleanly with a thermal cutting device (optional).

The advantages at a glance

- Strong Velcro fastener for frequent access
- Can be stretched over plugs and sockets
- Halogen-free
- Resistant to chemicals and solvents
- Melting point ~230 °C

Art. no.	Version	Version
Manual Wrap		
Dimensions: diameter 3.18 cm = 1 ¼ inch		
930.906*	1.0 m	· Black
930.907*	2.0 m	· Black
930.908*	3.0 m	· Black

Manual Wrap		
Dimensions: diameter 5.08 cm = 2 inches		
930.909*	1.0 m	· Black
930.910*	2.0 m	· Black
930.911*	3.0 m	· Black

* No storage type

Notes

Notes

Bachmann GmbH & Co. KG
Ernsthaldenstr. 33 / 70565 Stuttgart / Germany
Telephone +49 711 866 02-0 / Fax +49 711 866 02-34
info@bachmann.com / www.bachmann.com

2012.ITEN // We reserve the right to make technical modifications to the products described in this document and assume no responsibility for any mistakes or printing errors contained herein.